



Participating in Nurse-Family Partnership Gives Teenage Mothers High School Credit

Judy K Wong, Ocean R Berg*, Lanitra Williams, Diane Beetham, Maya Vasquez and Elizabeth Zamboldi-Moore

San Francisco Department of Public Health, San Francisco, CA 94102, USA

*Corresponding author: Ocean R Berg, MSN, Nurse Supervisor, San Francisco Department of Public Health, 30 Van Ness Avenue, Suite 210, San Francisco, CA 94102, USA, Tel: 415-260-1185; E-mail: ocean.berg@sfdph.org

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Abstract

Pilot continuing education program between Nurse-Family Partnership Nurse Home visitors and Hilltop High School for pregnant and parenting teenage girls.

Keywords: Teenage pregnancy; Nurse-family partnership; Hilltop high school; High school continuing education credits

Introduction

Teenage pregnancy is often negatively perceived in American society. The general assumption is that the lives of young mothers will be forever marked by poverty and lost potential. This perspective persists because teenage mothers who are low-income face a number of supportive and socioeconomic barriers. They are more likely to delay their education in comparison to their peers who postpone motherhood [1,2]. Less education results in lower pay and higher unemployment rates [3]. Teenage mothers are therefore at risk for family poverty and welfare dependence [4].

Decades of research, however, has given insight into the nuances of teenage pregnancy and illustrated a distinction between teen mothers who live a life of struggle and poverty and those who achieve their goals and live fruitful lives. In the United States, teen mothers who achieve educational achievement, and thus increased odds for success, do so when they have the support of their families, schools, and organizations to guide them through their formal education, the process of parenting, and the transition from adolescence to adulthood. Through programs and partnerships providing comprehensive health and social services that mitigate the effects of poverty, teenage mothers can succeed.

Nurse-Family Partnership (NFP) is among the organizations changing teen lives for the better. This national program was adopted by the San Francisco Department of Public Health in 2012, and now serves over 330 participants in the city and county annually. In 2016, NFP in San Francisco expanded services by launching a pilot program with community partner Hilltop High School, a public high school for pregnant and parenting teens. Students in the program get an academic boost by earning high school credit towards their graduation while receiving enhanced nursing support to meet the increased health needs and responsibilities of early motherhood.

Impact of Teenage Motherhood

For teenage mothers who are low-income, the impact of early childbearing can present social and economic challenges that persist through adulthood. Among them are decreases in education. In

statistical analyses of data from the National Longitudinal Study of Adolescent to Adult Health, Kane et al. [2] found that teenage mothers completed nearly three-quarters of a year less schooling than their peers who delayed motherhood until at least age 20. A review of literature by Basch [1] found a two-year delay of educational achievement when compared to women who postpone motherhood until age 30. These delays can have lasting effects. Teenage mothers are 10-12% less likely to complete high school and their chances of attending college decrease by 14-29% [1].

Decreases in educational achievement for teenage mothers can be detrimental as they negatively impact workforce participation. Individuals with lower levels of education typically have higher unemployment rates. This trend is supported by survey data from 2003-2013 showing unemployment rates were the highest, year after year, for people with less than a high school diploma [3]. Population data in 2015 supports this trend. Workers without a high school diploma had the highest unemployment rate at 8% while those with a doctoral degree had the lowest unemployment rate at 1.7% [5].

Workers with higher levels of education also earned more. When compared to workers who had less than a high school education, those with high school diplomas received an increase of \$185 (38%) in median weekly earnings [5]. Workers with some college education, but no degree, earned \$245 (50%) more per week. Workers with associate's degrees increased their weekly earnings by \$305 (62%). Those with the greatest financial gains attained bachelor's (\$644), master's (\$848), and doctoral degrees (\$1,130).

Young mothers with decreased educational achievement are at a socioeconomic disadvantage. Teenage pregnancy disproportionately affects minority youth, especially Latinos and African-Americans, in low-income urban communities [1]. Teenage mothers frequently bear sole childrearing responsibilities as single parents [4]. As a result, they are more likely to be poor, unemployed, and dependent on welfare [4]. Their daughters are also likely to become young mothers themselves, perpetuating intergenerational cycles of teen pregnancy [1,4].

Nurse-Family Partnership

NFP, a nationally recognized and awarded program, works with at-risk, first-time mothers and their families. Clients include those who are low-income, single parents, and youth (i.e., age 18 and younger).

The program provides home visits from registered public health nurses during pregnancy and up until the baby is two years old. Clients receive individualized support, including coordination of medical care; information about health, parenting, and family planning; and referrals to community services. They also receive emotional and all around general support as they adapt to their new parenting roles. Goals for educational achievement and gainful employment may be set too. Through NFP, new mothers in the program get the support they need to have a healthy pregnancy, care for their children, and become self-sufficient.

The NFP program model draws from extensive research using randomized, controlled trials conducted over nearly four decades [6,7]. These include longitudinal studies of three diverse populations of low-income, first-time mothers—the first beginning in 1977 with 400 participants in Elmira, New York; the second starting in 1990 with 1,138 participants during pregnancy and 743 participants during infancy trials in Memphis, Tennessee; and the third taking place in 1994 with 735 participants in Denver, Colorado [7,8]. All three studies showed participants in the program developed greater self-sufficiency and improved maternal life course through fewer closely-spaced pregnancies, increased employment, and shorter periods on government assistance [8,9]. For example, in the Elmira study, there was an 83% increase in workforce participation by the time the first child was four-years old [8,10]. In a 15-year follow-up of the Elmira study, researchers found enduring program benefits. Participants spent fewer months on welfare and on food stamps [8]. Thus, NFP program participants benefitted from short- and long-term economic gains.

Lasting Results of Supportive Programs

In addition to utilizing services like those of NFP, mothers in low-income communities can improve their families' socioeconomic circumstances through educational achievement. Sabol and Chase-Lansdale [11] discovered this outcome in a cohort of mothers whose children were enrolled in Head Start, the oldest federally funded preschool program in the United States. Head Start provides preschool children in low-income communities with comprehensive services to promote their healthy growth and development [12]. Using data from the randomized National Head Start Impact Study of 3,436 three- and four-year old children, Sabol and Chase-Lansdale [11] sought to determine the program's effect on maternal educational achievement. Mothers of children in the age three cohort of Head Start enrollees had a 9% increase in education received by the time their children were six-years old compared to the control group of mothers whose children were not enrolled in the program [11]. Educational gains for mothers in the age four cohort, however, were not statistically significant for a variety of factors. For example, children in the age three cohort attended Head Start for two years while those in the age four cohort attended the program for one year. As a result, mothers of the three-year olds had an extra year, while their children were in the program, to return to school to advance their own education [11]. Researchers recognize there may have been different views and levels of education, social support, and financial circumstances between the cohorts at baseline. Still, the study indicates children's programs like Head Start can boost maternal educational achievement through increased awareness of education's value, mothers' raised expectations of themselves, support to parents, and having access to subsidized childcare for educational pursuits [11].

Another study using data from the Chicago School Readiness Project supports findings that Head Start improves maternal

educational achievement. Pressler et al. [13] conducted a randomized controlled trial and longitudinal follow-up study on 432 mothers whose children were enrolled in the program. They found 39% of mothers increased their educational achievement and of these women, 65% closed the "degree gap" to earn college credentials or degrees by the time their children were in the fifth grade [13]. Researchers also found improved economic outcomes. The women increased their monthly household incomes by about \$800.

Children enrolled in supportive programs have demonstrated developmental gains too. A study by Zhai et al. [14] using data from the National Head Start Impact Study found children in the program had greater cognitive and behavioral development compared with their peers who were not in the program. Another study using data from the Early Childhood Longitudinal Study–Birth Cohort comparing children enrolled in Head Start and those in parental or nonparental childcare found children in the program had greater school readiness, as indicated by higher early reading and math scores [15]. At-risk children, including those whose parents were less educated, had the most benefits, especially if they attended Head Start regularly and for longer periods (i.e., over 20 h per week).

Children of mothers in NFP studies had similar outcomes. A two year follow-up of children whose mothers were in the Denver trial showed they had increased language development at age four, making them better prepared to start school [16]. A 12 year follow-up of children born to mothers in the Memphis trial found that they had better reading and math achievement at age nine compared to their counterparts who were not in the program. Thus, supportive services can raise children's cognitive abilities and academic readiness.

Hilltop High School—A History of Support

More programs, like Nurse-Family Partnership and Head Start, exist now to support young mothers and their children than in the past. Prior to 1968, pregnant teenagers within the San Francisco Unified School District (SFUSD) were only assigned a "homebound" teacher as pregnancy was considered a glandular disorder to be treated at home. In 1968, the SFUSD, in collaboration with teachers and obstetric, gynecologic, and pediatric doctors, established the Pregnant Minors Program to serve teenage mothers in schools. Between 1968 and the 1970s, Pregnant Minors classrooms were established at several San Francisco hospitals. Girls would go to a prenatal clinic and then to class. After delivery, the teens had to register at a SFUSD comprehensive school because the Pregnant Minors Program did not provide childcare and mothers could not bring their infants to class. This practice resulted in a very high dropout rate.

It quickly became apparent that the Pregnant Minors Program was not effective. Freestanding high schools for pregnant and postpartum teens were then created. Hilltop High School, formerly called Hunters Point School for Girls, served primarily girls in the southern part of San Francisco who delivered at San Francisco General and St. Luke's Hospital. Simpatico High School, located in the northern section of San Francisco, served girls from Kaiser Hospital, Children's Hospital, and the University of California at San Francisco.

Today, Hilltop High School offers enrollment to all expectant and parenting school-aged students within SFUSD. Students complete academic courses to graduate high school and have access to the Hilltop Special Services Center, home of the former California School Age Families Education (Cal-SAFE) program. Objectives of Cal-SAFE were to help students complete their secondary education; foster

healthy pregnancies and babies; obtain quality childcare; and learn parenting, decision-making and life skills [17]. When the state-funded program ended in 2015, SFUSD continued services for students with its financial support. Other resources at Hilltop include an existing Pregnant Minors Program which makes available a school nurse, child development specialist, and nutritionist. The school also has an on-site nursery operated by Felton Institute Family Service Agency of San Francisco which provides childcare for infants ages two weeks to eighteen months. These infants can transition to the on-site Head Start program until they start kindergarten. Because mothers have proximity to their infants and children, they are more likely to come to and remain in school during the course of the day. They can also utilize services that promote the care of a child. For instance, childcare specialists call students during class if an infant needs to be breastfed. Mothers can bring their children to the campus for lunch. In addition, the school's shorter hours reflect its commitment to the student population. Parents are able to spend more time with their children. Students can receive ancillary education and direct case management services through Hilltop's partnership with the Felton Teenage Pregnancy and Parenting Program as well. Using a holistic approach, the school and supportive programs within it work in concert, promoting the present and future success of students and their families.

High School Credit Pilot Program

In the summer of 2016, San Francisco Nurse-Family Partnership and Hilltop High School piloted a voluntary program to help teen mothers earn extra credit for education received during home visits by registered nurses. The aim of the program was not only to increase participants' ability to care for themselves and their families but to increase their chances of graduating. Initial research for the program began in the fall of 2013 by a NFP home visiting nurse. She sought out high school credit programs within NFP, communicated with a NFP supervisor from San Diego County where there was an existing program model, and obtained their syllabus and consents for enrollment. She contacted the SFUSD in 2014 and began discussions in 2015 with Hilltop High School's administration about the program. While the school's interest was strong, San Francisco NFP was new and in the process of developing its foundation as a program. The inclusion of a high school partnership was too ambitious at this stage.

With an increase in staff and a third supervisor added to the team, San Francisco NFP was better able to support new projects in the spring of 2016. Following and expanding on the San Diego model, the nurse and her supervisor, who were the project's leads, created a pilot program designed specifically for Hilltop High School. The stakeholders identified were the school's head administrator, school nurse, and school counselors. Project leaders from NFP and the school administrator met weekly to develop the "Strategies to Success" extra credit program and integrate the NFP program into Hilltop's curriculum. Students who participate in the program would receive two and a half to five extracurricular credits per semester.

The next step was to create a syllabus, instructions for enrolling clients, and consent packs detailing the responsibilities and expectations of students in order for them to obtain academic credit. Home visitors from NFP were trained to complete the consent forms and log visits with students. By project implementation, nurses had ready access to Hilltop consent packets to enroll students. Project leads were available to answer questions, support learning, and receive information if there were new enrollees. To track program

effectiveness, nurses were surveyed about their interactions with Hilltop clients. Data collected included the number of Hilltop students enrolled into the program, frequency and locations of client meetings, issues with attrition, level of parental involvement, and graduation rates.

Throughout the project, visibility of Nurse-Family Partnership was of paramount importance to instill good will and promote use of the services. Nurse home visitors attended prenatal classes to introduce and discuss the program with newly enrolled students. Project leaders from NFP continued to reach out to the school's nurse and counselors to provide support. They were also highly visible at the school, attending prenatal classes and other special school functions.

Program Outcomes

The program was initially piloted with one student and from June to December 2016, 15 total Hilltop clients were enrolled in NFP. Since getting extra credit for participation was voluntary, seven clients choose to receive this benefit. Of the seven clients, two dropped out of school and two are being evaluated by administration to determine if they have attended enough school and NFP visits to receive the extra credit. Nurses at NFP are now strengthening efforts via collaborative case management to help enrolled students stay in school and in the program [18,19].

Throughout project implementation, there were process improvements. Face-to-face communication was established between NFP and Hilltop. Each member of the team had a different communication style so this was managed by utilizing many forms of communication including phone calls, texts, and calendar events. Initially, nurses and the Hilltop administrator had weekly meetings to discuss the status of enrolled clients, their school attendance, and need for community referrals and follow-up visits. It became evident that only monthly meetings were necessary and the day of the week was adjusted to meet all team members' schedules.

New processes and procedures were also implemented. For example, the issue of protected client health information arose. To legally protect Hilltop staff when they discussed students' protected health information, a "Wellness Agreement" was added to students' consent packs. Observing the systems in place at Hilltop also led the NFP team to realize that NFP staff integration in the referral process would supplement knowledge about students and reinforce a strong and important relationship with the school nurse. The NFP team was trained to do referrals once a month, which included receiving updates about students. In addition, the pilot program was a regular agenda item at NFP team meetings to share program changes or developments.

Looking ahead, the NFP team will attend Hilltop High School's staff meeting in the winter of 2017 to answer questions and reinforce the continued education program. The school administrator retired in the spring of 2017 and a warm handoff was given. To facilitate quality improvement, a post-intervention survey will be circulated to NFP staff and there have been discussions of Hilltop administering their own evaluation of NFP services.

Conclusion

As studies show, teenage mothers in supportive programs are more likely to increase their educational achievement, which can raise earnings and improve their life course. The pilot program by NFP and

Hilltop High School is still new and evolving but it continues to be an invaluable resource. Teenage mothers can now receive individualized and integrated services designed to help them graduate. These services include academic support; life and parenting skills; free, on-site childcare; a nutritionist; and comprehensive case management services. Such a rich school environment mitigates the potentially long-term effects of being in an underserved community. The collaboration between NFP and Hilltop High School is thus prime example of the partnerships that can form to facilitate the success of young mothers.

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